Union Calendar No. 73

105TH CONGRESS H. R. 1277

[Report No. 105-67, Parts I and II]

BILL

To authorize appropriations for fiscal year 1998 and fiscal year 1999 for the civilian research, development, demonstration, and commercial application activities of the Department of Energy, and for other purposes.

June 9, 1997

Reported from the Committee on Commerce with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

Union Calendar No. 73

105TH CONGRESS 1ST SESSION

H. R. 1277

[Report No. 105-67, Parts I and II]

To authorize appropriations for fiscal year 1998 and fiscal year 1999 for the civilian research, development, demonstration, and commercial application activities of the Department of Energy, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

April 10, 1997

Mr. CALVERT introduced the following bill; which was referred to the Committee on Science

April 22, 1997

Reported with an amendment, referred to the Committee on Commerce for a period ending not later than June 6, 1997, for consideration of such provisions of the bill and amendment as fall within the jurisdiction of that committee pursuant to clause 1(e), rule X

[Strike out all after the enacting clause and insert the part printed in italic]

June 5, 1997

Referral to the Committee on Commerce extended for a period ending not later than June 9, 1997

June 9, 1997

Additional sponsors: Mr. Brown of California, Ms. Jackson-Lee of Texas, and Mr. Foley

June 9, 1997

Reported from the Committee on Commerce with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed [Strike out all after the enacting clause and insert the part printed in boldface roman]
[For text of introduced bill, see copy of bill as introduced on April 10, 1997]

A BILL

To authorize appropriations for fiscal year 1998 and fiscal year 1999 for the civilian research, development, demonstration, and commercial application activities of the Department of Energy, and for other purposes.

1	Be it enacted by the Senate and House of Representa-
2	tives of the United States of America in Congress assembled,
3	SECTION 1. SHORT TITLE.
4	This Act may be cited as the "Department of Energy
5	Civilian Research and Development Act of 1997".
6	SEC. 2. DEFINITIONS.
7	For purposes of this Act—
8	(1) the term "CERN" means the European Or-
9	ganization for Nuclear Research;
10	(2) the term "Department" means the Depart-
11	$ment\ of\ Energy;$
12	(3) the term "Large Hadron Collider project"
13	means the Large Hadron Collider project at CERN;
14	and
15	(4) the term "Secretary" means the Secretary of
16	Energy.

1 SEC. 3. AUTHORIZATION OF APPROPRIATIONS.

2	(a) Energy Supply Research and Development
3	Activities.—There are authorized to be appropriated to
4	the Secretary for Energy Supply Research and Develop-
5	ment operating expenses and capital equipment
6	\$2,838,719,000 for fiscal year 1998 and \$2,847,812,000 for
7	fiscal year 1999, of which—
8	(1) \$272,820,000 for fiscal year 1998 (reduced by
9	\$15,000,000 to reflect the use of prior year balances)
10	and \$270,342,000 for fiscal year 1999 shall be for
11	Solar and Renewable Resources Technologies, includ-
12	ing—
13	(A) \$2,150,000 for fiscal year 1998 and
14	\$2,150,000 for fiscal year 1999 for Solar Build-
15	ing Technology Research;
16	(B) \$63,900,000 for fiscal year 1998 and
17	\$64,900,000 for fiscal year 1999 for Photovoltaic
18	Energy Systems;
19	(C) \$18,170,000 for fiscal year 1998 and
20	\$13,620,000 for fiscal year 1999 for Solar Ther-
21	mal Energy Systems;
22	(D) \$28,835,000 for fiscal year 1998 and
23	\$28,190,000 for fiscal year 1999 for Biopower/
24	Biofuels Energy Systems:

1	(E) \$29,500,000 for fiscal year 1998 and
2	\$18,140,000 for fiscal year 1999 for Wind En-
3	ergy Systems;
4	(F) \$2,800,000 for fiscal year 1998 and
5	\$500,000 for fiscal year 1999 for the National
6	$Renewable\ Energy\ Laboratory;$
7	(G) \$19,518,000 for fiscal year 1998 and
8	\$19,518,000 for fiscal year 1999 for Geothermal
9	Electric Research and Development and Deploy-
10	ment;
11	(H) \$1,000,000 for fiscal year 1998 for Hy-
12	dropower;
13	(I) \$44,500,000 for fiscal year 1998 and
14	\$36,500,000 for fiscal year 1999 for Electric En-
15	ergy Systems and Storage, of which—
16	(i) \$8,000,000 for fiscal year 1998
17	shall be for Electric and Magnetic Fields
18	Research and Development;
19	(ii) \$32,500,000 for fiscal year 1998
20	and \$32,500,000 for fiscal year 1999 shall
21	be for High-Temperature Superconductivity
22	Research and Development; and
23	(iii) \$4,000,000 for fiscal year 1998
24	and \$4,000,000 for fiscal year 1999 shall be
25	for Energy Storage Systems;

1	(J) \$50,000,000 for fiscal year 1998 and
2	\$75,000,000 for fiscal year 1999 shall be for a
3	Solar and Renewable Energy Science Initiative,
4	to be managed by the Director of the Office of
5	Energy Research, in consultation with the As-
6	sistant Secretary for Energy Efficiency and Re-
7	newable Energy on the goals and priorities of the
8	initiative, for grants to be competitively awarded
9	and subject to peer review for research related to
10	solar and renewable energy; and
11	(K) \$12,447,000 for fiscal year 1998 and
12	\$11,824,000 for fiscal year 1999 for Program Di-
13	rection;
14	(2) \$173,166,000 for fiscal year 1998 and
15	\$146,540,000 for fiscal year 1999 shall be for Nuclear
16	Energy, including—
17	(A) \$47,000,000 for fiscal year 1998 and
18	\$43,350,000 for fiscal year 1999 for Advanced
19	Radioisotope Power Systems;
20	(B) \$9,500,000 for fiscal year 1998 and
21	\$8,809,000 for fiscal year 1999 for Oak Ridge
22	Landlord;
23	(C) \$3,217,000 for fiscal year 1998 and
24	\$3,217,000 for fiscal year 1999 for Test Reactor
25	$Area\ Landlord;$

1	(D) \$2,000,000 for fiscal year 1998 for Ad-
2	vanced Test Reactor Fusion Irradiations;
3	(E) \$6,000,000 for fiscal year 1998 and
4	\$6,000,000 for fiscal year 1999 for University
5	Nuclear Science and Reactor Support;
6	(F) \$70,535,000 for fiscal year 1998 and
7	\$60,000,000 for fiscal year 1999 for Termination
8	Costs;
9	(G) \$20,854,000 for fiscal year 1998 and
10	\$11,807,000 for fiscal year 1999 for Isotope Sup-
11	port; and
12	(H) \$14,060,000 for fiscal year 1998 and
13	\$13,357,000 for fiscal year 1999 for Program Di-
14	rection;
15	(3) \$77,160,000 for fiscal year 1998 (reduced by
16	\$3,535,000 reflecting the use of prior year balances)
17	and \$76,828,000 for fiscal year 1999 shall be for Ura-
18	nium Programs;
19	(4) \$107,870,000 for fiscal year 1998 and
20	\$100,237,000 for fiscal year 1999 shall be for Envi-
21	ronment, Safety, and Health;
22	(5) \$367,538,000 for fiscal year 1998 and
23	\$378,564,000 for fiscal year 1999 shall be for Biologi-
24	cal and Environmental Research, including—

1	(A) \$157,037,000 for fiscal year 1998 and
2	\$161,748,000 for fiscal year 1999 for Life
3	Sciences;
4	(B) \$100,954,000 for fiscal year 1998 and
5	\$103,983,000 for fiscal year 1999 for Environ-
6	mental Processes;
7	(C) \$66,435,000 for fiscal year 1998 and
8	\$68,428,000 for fiscal year 1999 for Environ-
9	$mental\ Remediation;$
10	(D) \$43,112,000 for fiscal year 1998 and
11	\$44,405,000 for fiscal year 1999 for Medical Ap-
12	plications and Measurement Sciences; and
13	(E) \$1,000,000 for fiscal year 1998 and
14	\$1,000,000 for fiscal year 1999 for the United
15	States-Mexico Foundation for Science for re-
16	search on biosciences and the environment,
17	except that, notwithstanding subparagraphs (A)
18	through (E), the total amount which may be appro-
19	priated under this paragraph shall not exceed the
20	overall sums stated at the beginning of this para-
21	graph;
22	(6) \$240,000,000 for fiscal year 1998 and
23	\$240,000,000 for fiscal year 1999 shall be for Fusion
24	Energy Sciences, of which \$5,000,000 for fiscal year

1	1998 and \$5,000,000 for fiscal year 1999 shall be for
2	General Plasma Science;
3	(7) \$659,812,000 for fiscal year 1998 and
4	\$678,888,000 for fiscal year 1999 shall be for Basic
5	Energy Sciences, including—
6	(A) \$391,047,000 for fiscal year 1998 and
7	\$402,060,000 for fiscal year 1999 for Materials
8	Sciences, of which not to exceed \$5,000,000 for
9	each such fiscal year may be used for the High
10	Flux Beam Reactor at Brookhaven National
11	Laboratory;
12	(B) \$199,933,000 for fiscal year 1998 and
13	\$205,931,000 for fiscal year 1999 for Chemical
14	Sciences;
15	(C) \$41,371,000 for fiscal year 1998 and
16	\$42,612,000 for fiscal year 1999 for Engineering
17	and Geosciences; and
18	(D) \$27,461,000 for fiscal year 1998 and
19	\$28,285,000 for fiscal year 1999 for Energy Bio-
20	sciences;
21	(8) \$140,907,000 for fiscal year 1998 and
22	\$145,134,000 for fiscal year 1999 shall be for Com-
23	putational and Technology Research, including—

1	(A) \$117,490,000 for fiscal year 1998 and
2	\$121,014,000 for fiscal year 1999 for Mathemati-
3	cal, Information, and Computational Sciences;
4	(B) \$15,829,000 for fiscal year 1998 and
5	\$16,304,000 for fiscal year 1999 for Laboratory
6	Technology Research; and
7	(C) \$7,588,000 for fiscal year 1998 and
8	\$7,816,000 for fiscal year 1999 for Advanced En-
9	ergy Projects;
10	(9) \$1,500,000 for fiscal year 1998 and
11	\$1,500,000 for fiscal year 1999 shall be for Energy
12	Research Analysis;
13	(10) \$29,070,000 for fiscal year 1998 and
14	\$27,434,000 for fiscal year 1999 shall be for Energy
15	Research-Energy Supply Program Direction;
16	(11) \$682,387,000 for fiscal year 1998 and
17	\$682,387,000 for fiscal year 1999 shall be for Envi-
18	ronmental Restoration and Waste Management (Non-
19	Defense), including—
20	(A) \$457,625,000 for fiscal year 1998 and
21	\$457,625,000 for fiscal year 1999 for Environ-
22	mental Restoration;
23	(B) \$153,004,000 for fiscal year 1998 and
24	\$153,004,000 for fiscal year 1999 for Waste
25	Management; and

1	(C) \$71,758,000 for fiscal year 1998 and
2	\$71,758,000 for fiscal year 1999 for Nuclear Ma-
3	terial and Facility Stabilization;
4	(12) \$11,554,000 for fiscal year 1998 and
5	\$11,152,000 for fiscal year 1999 shall be for Technical
6	Information Management; and
7	(13) \$93,480,000 for fiscal year 1998 and
8	\$88,806,000 for fiscal year 1999 shall be for Field
9	Operations.
10	(b) Energy Assets Acquisition.—There are author-
11	ized to be appropriated to the Secretary for the purchase,
12	construction, expansion, and acquisition of real plant,
13	property, and other physical assets for energy supply re-
14	search and development activities, \$43,582,000 for fiscal
15	year 1998 and \$45,332,000 for fiscal year 1999, of which—
16	(1) for Solar and Renewable Resources Tech-
17	nology, \$2,200,000 for fiscal year 1998 shall be for
18	completion of Project 96–E–100, Field Test Labora-
19	tory Building Renovation and Expansion, National
20	Renewable Energy Laboratory;
21	(2) for Nuclear Energy, \$4,425,000 for fiscal
22	year 1998 and \$6,425,000 for fiscal year 1999 shall
23	be for completion of Project 95–E–201, Test Reactor
24	Area Fire and Life Safety Improvements, Idaho Na-
25	tional Engineering and Environmental Laboratoru:

1	(3) for Uranium Programs—
2	(A) \$400,000 for fiscal year 1998 and
3	\$5,200,000 for fiscal 1999 for completion of
4	$Project$ 98–U–200, DUF_6 $Cylinder$ $Storage$
5	Yards, K-25 Plant, Oak Ridge, Tennessee; and
6	(B) \$6,000,000 for fiscal year 1998 and
7	\$10,700,000 for fiscal year 1999 for completion
8	of Project 96-U-201, DUF ₆ Cylinder Storage
9	Yards, Paducah, Kentucky, Gaseous Diffusion
10	Plant;
11	(4) for Basic Energy Sciences, \$7,000,000 for fis-
12	cal year 1998 and \$4,000,000 for fiscal year 1999 for
13	completion of Project 96–E–300, Combustion Re-
14	search Facility, Phase II, Sandia National Labora-
15	tories, Livermore, California;
16	(5) for Multiprogram Energy Laboratories-Fa-
17	cilities Support, \$21,260,000 for fiscal year 1998 and
18	\$19,007,000 for fiscal year 1999 for—
19	(A) Project MEL-001, Multiprogram En-
20	ergy Laboratories Infrastructure Project, Various
21	Locations, \$7,259,000 for fiscal year 1998 and
22	\$12,161,000 for fiscal year 1999;
23	(B) Project 96–E–333, Multiprogram En-
24	ergy Laboratories Upgrades, Various Locations,

1	\$5,273,000 for fiscal year 1998 and \$268,000 for
2	fiscal year 1999;
3	(C) Project 95–E–308, Sanitary System
4	Modifications, Phase II, Brookhaven National
5	Laboratory, Upton, New York, \$568,000 for fis-
6	cal year 1998;
7	(D) Project 95–E–307, Fire Safety Im-
8	provements-Phase III, Argonne National Labora-
9	tory, Argonne, Illinois, \$718,000 for fiscal year
10	1998;
11	(E) Project 95–E–301, Central Heating
12	Plant Rehabilitation-Phase I, Argonne National
13	Laboratory, Argonne, Illinois, \$3,442,000 for fis-
14	cal year 1998; and
15	(F) Project 94–E–363, Roofing Improve-
16	ments, Oak Ridge National Laboratory, Oak
17	Ridge, Tennessee, \$4,000,000 for fiscal year 1998
18	and \$6,578,000 for fiscal year 1999; and
19	(6) for Environmental Restoration and Waste
20	Management (Non-Defense), \$2,297,000 for fiscal year
21	1998, of which—
22	(A) \$1,900,000 shall be for completion of
23	Project 94–E–602, Bethel Federal Facility Agree-
24	ment Upgrade, Oak Ridge National Laboratory;
25	and

1	(B) \$397,000 shall be for completion of
2	Project 93–E–900, Long-Term Storage of TMI–
3	2 Fuel; Idaho National Energy and Environ-
4	mental Laboratory, Idaho.
5	(c) General Science and Research Activities.—
6	There are authorized to be appropriated to the Secretary
7	for General Science and Research Activities operating ex-
8	penses and capital equipment—
9	(1) \$865,210,000 for fiscal year 1998 (reduced by
10	\$15,000,000 to reflect the use of prior year balances),
11	including—
12	(A) \$599,185,000 for High Energy Physics;
13	(B) \$256,525,000 for Nuclear Physics; and
14	(C) \$9,500,000 for Program Direction; and
15	(2) \$941,000,000 for fiscal year 1999, includ-
16	ing—
17	(A) \$607,645,000 for High Energy Physics;
18	(B) \$324,330,000 for Nuclear Physics; and
19	(C) \$9,025,000 for Program Direction.
20	None of the funds authorized for High Energy Physics by
21	this subsection or subsection (d) may be used for the Large
22	Hadron Collider project, unless the Secretary, in consulta-
23	tion with the Director of the National Science Foundation,
24	has transmitted to the Committee on Science of the House
25	of Representatives and the Committee on Energy and Natu-

1	ral Resources of the Senate a report on the impacts of such
2	funding on the operations and viability of United States
3	high energy and nuclear physics facilities.
4	(d) Science Assets Acquisition.—There are au-
5	thorized to be appropriated to the Secretary for the pur-
6	chase, construction, expansion, and acquisition of real
7	plant, property, and other physical assets for general
8	science and research activities, \$126,870,000 for fiscal year
9	1998, of which—
10	(1) \$50,850,000 shall be for High Energy Phys-
11	ics, including—
12	(A) \$30,950,000 for completion of Project
13	92–G–302, Fermilab Main Injector, Fermi Na-
14	$tional\ Accelerator\ Laboratory,\ Il lino is;$
15	(B) \$9,400,000 for completion of Project
16	97–G–303, Stanford Linear Accelerator Center
17	Master Station Upgrade, California;
18	(C) \$5,500,000 for architectural engineering
19	and technical design work for Project 98–G–304,
20	Neutrinos at the Main Injector, Fermi National
21	Accelerator Laboratory, Illinois; and
22	(D) \$5,000,000 for completion of Project
23	98–G–305, Fermilab C-Zero Area Experimental
24	Hall, Fermi National Accelerator Laboratory, Il-
25	linois: and

1	(2) \$76,020,000 shall be for Nuclear Physics, for
2	completion of Project 91–G–300, Relativistic Heavy
3	Ion Collider, Brookhaven National Laboratory,
4	Upton, New York.
5	(e) Fossil Energy Research and Development.—
6	There are authorized to be appropriated to the Secretary
7	for Fossil Energy Research and Development operating ex-
8	penses, capital equipment, and construction, \$348,854,000
9	for fiscal year 1998 and \$348,185,000 for fiscal year 1999,
10	of which—
11	(1) \$105,831,000 for fiscal year 1998 and
12	\$104,206,000 for fiscal year 1999 shall be for Coal op-
13	erating expenses, including—
14	(A) \$5,064,000 for fiscal year 1998 and
15	\$5,064,000 for fiscal year 1999 for Coal Prepa-
16	ration;
17	(B) \$5,816,000 for fiscal year 1998 and
18	\$5,816,000 for fiscal year 1999 for Direct Lique-
19	faction;
20	(C) \$4,223,000 for fiscal year 1998 and
21	\$4,223,000 for fiscal year 1999 for Indirect Liq-
22	ue faction;
23	(D) \$741,000 for fiscal year 1998 and
24	\$741,000 for fiscal year 1999 for Advanced

1	Clean Fuels Research Advanced Research and
2	$Environmental\ Technology;$
3	(E) \$5,462,000 for fiscal year 1998 and
4	\$5,462,000 for fiscal year 1999 for Advanced
5	Pulverized Coal-Fired Powerplant;
6	(F) \$10,927,000 for fiscal year 1998 and
7	\$10,927,000 for fiscal year 1999 for Indirect
8	Fired Cycle;
9	(G) \$22,342,000 for fiscal year 1998 and
10	\$20,717,000 for fiscal year 1999 for High-Effi-
11	ciency-Integrated Gasification Combined Cycle;
12	(H) \$17,875,000 for fiscal year 1998 and
13	\$17,875,000 for fiscal year 1999 for High-Effi-
14	ciency Pressurized Fluidized Bed;
15	(I) \$9,734,000 for fiscal year 1998 and
16	\$9,734,000 for fiscal year 1999 for Advanced
17	Clean/Efficient Power Systems Advanced Re-
18	search and Environmental Technology; and
19	(J) \$23,647,000 for fiscal year 1998 and
20	\$23,647,000 for fiscal year 1999 for Advanced
21	Research and Technology Development;
22	(2) \$47,419,000 for fiscal year 1998 and
23	\$46,464,000 for fiscal year 1999 shall be for Oil Tech-
24	nology operating expenses, including—

1	(A) \$31,157,000 for fiscal year 1998 and
2	\$31,157,000 for fiscal year 1999 for Exploration
3	and Production Supporting Research;
4	(B) \$3,931,000 for fiscal year 1998 and
5	\$3,931,000 for fiscal year 1999 for Recovery
6	$Field\ Demonstrations;$
7	(C) \$6,411,000 for fiscal year 1998 and
8	\$5,456,000 for fiscal year 1999 for Exploration
9	and Production Environmental Research; and
10	(D) \$5,920,000 for fiscal year 1998 and
11	\$5,920,000 for fiscal year 1999 for Processing
12	Research and Downstream Operations;
13	(3) \$85,877,000 for fiscal year 1998 and
14	\$85,877,000 for fiscal year 1999 shall be for Gas oper-
15	ating expenses, including—
16	(A) \$14,123,000 for fiscal year 1998 and
17	\$14,123,000 for fiscal year 1999 for Natural Gas
18	Research Exploration and Production;
19	(B) \$993,000 for fiscal year 1998 and
20	\$993,000 for fiscal year 1999 for Natural Gas
21	Research Delivery and Storage;
22	(C) \$31,379,000 for fiscal year 1998 and
23	\$31,379,000 for fiscal year 1999 for Natural Gas
24	Research Advanced Turbine Systems;

1	(D) \$4,808,000 for fiscal year 1998 and
2	\$4,808,000 for fiscal year 1999 for Natural Gas
3	Research Utilization;
4	(E) \$4,617,000 for fiscal year 1998 and
5	\$4,617,000 for fiscal year 1999 for Natural Gas
6	Research Environmental Research/Regulatory
7	Analysis;
8	(F) \$1,210,000 for fiscal year 1998 and
9	\$1,210,000 for fiscal year 1999 for Fuel Cells
10	$Advanced\ Research;$
11	(G) \$16,335,000 for fiscal year 1998 and
12	\$16,335,000 for fiscal year 1999 for Fuel Cells
13	Molten Carbonate Systems to continue cost-
14	shared cost reduction and performance improve-
15	ment of one system; and
16	(H) \$12,412,000 for fiscal year 1998 and
17	\$12,412,000 for fiscal year 1999 for Fuel Cells
18	$Advanced\ Concepts;$
19	(4) \$61,783,000 for fiscal year 1998 and
20	\$62,494,000 for fiscal year 1999 shall be for Program
21	Direction and Management Support operating ex-
22	penses, including—
23	(A) \$13,676,000 for fiscal year 1998 and
24	\$12,992,000 for fiscal year 1999 for Head-
25	quarters Program Direction; and

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on the goals and priorities of the initiative, for grants

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1	to be competitively awarded and subject to peer re-
2	view for research relating to fossil energy.
3	Notwithstanding paragraphs (1) through (9), the total
4	amount which may be appropriated under this subsection
5	shall not exceed the overall sums stated at the beginning
6	of this subsection.
7	(f) Energy Conservation Research and Develop-
8	MENT.—There are authorized to be appropriated to the Sec-
9	retary for Energy Conservation Research and Development
10	operating expenses and capital equipment, \$416,908,000 for
11	fiscal year 1998 (reduced by \$20,000,000 to reflect the use
12	of prior year balances) and \$439,403,000 for fiscal year
13	1999, of which—
14	(1) \$41,004,000 for fiscal year 1998 and
15	\$40,230,000 for fiscal year 1999 shall be for the
16	Building Technology, State and Community Sector
17	(Non-Grants), including—
18	(A) \$8,762,000 for fiscal year 1998 and
19	\$8,762,000 for fiscal year 1999 for Building Sys-
20	tems Design for Building America Program;
21	(B) \$20,550,000 for fiscal year 1998 and
22	\$20,250,000 for fiscal year 1999 for Building
23	Equipment and Materials; and

1	(C) \$11,692,000 for fiscal year 1998 and
2	\$11,218,000 for fiscal year 1999 for Management
3	and Planning;
4	(2) \$125,380,000 for fiscal year 1998 and
5	\$125,048,000 for fiscal year 1999 shall be for the In-
6	dustry Sector, including—
7	(A) \$55,660,000 for fiscal year 1998 and
8	\$55,660,000 for fiscal year 1999 for Industries of
9	the Future (Specific);
10	(B) \$39,120,000 for fiscal year 1998 and
11	\$39,120,000 for fiscal year 1999 for Industries of
12	$the\ Future\ (Crosscutting);$
13	(C) \$23,950,000 for fiscal year 1998 and
14	\$23,950,000 for fiscal year 1999 for Technology
15	Access; and
16	(D) \$6,650,000 for fiscal year 1998 and
17	\$6,318,000 for fiscal year 1999 for Management
18	and Planning;
19	(3) \$179,576,000 for fiscal year 1998 and
20	\$179,225,000 for fiscal year 1999 shall be for the
21	Transportation Sector, including—
22	(A) \$2,700,000 for fiscal year 1998 and
23	\$2,700,000 for fiscal year 1999 for Clean Cities:

1	(B) \$124,046,000 for fiscal year 1998 and
2	\$124,046,000 for fiscal year 1999 for Advanced
3	$Automotive \ Technologies;$
4	(C) \$18,000,000 for fiscal year 1998 and
5	\$18,000,000 for fiscal year 1999 for Advanced
6	Heavy Vehicle Technologies;
7	(D) \$30,500,000 for fiscal year 1998 and
8	\$30,500,000 for fiscal year 1999 for Transpor-
9	tation Materials Technologies; and
10	(E) \$7,030,000 for fiscal year 1998 and
11	\$6,679,000 for fiscal year 1999 for Implementa-
12	tion and Program Management,
13	except that, notwithstanding subparagraphs (A)
14	through (E), the total amount which may be appro-
15	priated under this paragraph shall not exceed the
16	overall sums stated at the beginning of this para-
17	graph;
18	(4) \$20,948,000 for fiscal year 1998 and
19	\$19,900,000 for fiscal year 1999 shall be for Policy
20	and Management; and
21	(5) \$50,000,000 for fiscal year 1998 and
22	\$75,000,000 for fiscal year 1999 shall be for an En-
23	ergy Efficiency Science Initiative to be managed by
24	the Director of the Office of Energy Research, in con-
25	sultation with the Assistant Secretary for Energy Ef-

1	ficiency and Renewable Energy on the goals and pri-
2	orities of the initiative, for grants to be competitively
3	awarded and subject to peer review for research relat-
4	ing to energy efficiency.
5	SEC. 4. FUNDING LIMITATIONS.
6	None of the funds authorized by this Act for fiscal year
7	1998 or fiscal year 1999 may be used for the following pro-
8	grams, projects, and activities, except to fulfill contractual
9	obligations:
10	(1) Nuclear Energy Advanced Light Water Reac-
11	tor.
12	(2) Nuclear Energy Commercial Reactor.
13	(3) Nuclear Energy Security.
14	(4) Nuclear Energy Termination Costs Gas Tur-
15	bine-Modular Helium Reactor.
16	(5) Nuclear Energy Termination Costs Advanced
17	Light Water Reactor.
18	(6) Fossil Energy Research and Development
19	Advanced Research and Technology Development Coal
20	Technology Export.
21	(7) Clean Coal Technology Program.
22	SEC. 5. NATIONAL ACADEMY OF SCIENCES REPORTS.
23	(a) High Energy and Nuclear Physics.—The Sec-
24	retary shall enter into appropriate arrangements with Na-
25	tional Academy of Sciences for the Academy to prepare a

- 1 report on the high energy and nuclear physics activities of
- 2 the Department, assuming a combined budget of
- 3 \$977,080,000 for all activities authorized under section 3
- 4 (c) and (d) for fiscal year 1998, and \$941,000,000 for each
- 5 of the fiscal years 1999, 2000, 2001, and 2002. The report
- 6 shall include—
- 7 (1) a priority list of research opportunities, in-8 cluding both ongoing and proposed activities;
- 9 (2) an analysis of the relevance of each research 10 facility to the research opportunities listed under 11 paragraph (1);
- (3) recommendations for the optimal balance
 among facility operations, construction, and research
 support and the optimal balance between university
 and laboratory research programs; and
- (4) recommended schedules for the continuation,
 consolidation, or termination of each research program, and continuation, upgrade, transfer, or closure
 of each research facility.
- 20 Not later than December 31, 1997, the Secretary shall trans-
- 21 mit to the Committee on Science of the House of Representa-
- 22 tives and the Committee on Energy and Natural Resources
- 23 of the Senate the report prepared under this subsection.
- 24 (b) Basic Energy Sciences.—(1) The Secretary
- 25 shall enter into appropriate arrangements with the Na-

1	tional Academy of Sciences for the Academy to prepare a
2	report on the basic energy sciences activities of the Depart-
3	ment, based on the following three budget options for the
4	entire Basic Energy Sciences account and all related re-
5	search and energy asset activities:
6	(A) Provision of \$683,000,000 for each of the fis-
7	cal years 1999 through 2002.
8	(B) Provision of \$683,000,000 for fiscal year
9	1999, and an amount reflecting a three percent reduc-
10	tion in each year thereafter through fiscal year 2002.
11	(C) Provision of \$683,000,000 for fiscal year
12	1999, and an amount reflecting a three percent in-
13	crease in each year thereafter through fiscal year
14	2002.
15	(2) None of the figures described in paragraph (1) (A)
16	through (C) shall be altered to reflect inflationary allow-
17	ances. The report shall include—
18	(A) a priority list of research opportunities, in-
19	cluding both ongoing and proposed activities;
20	(B) an analysis of the relevance of each research
21	facility to the research opportunities listed under sub-
22	paragraph (A);
23	(C) recommendations for the optimal balance
24	among facility operations, construction, and research

- support and the optimal balance between university
 and laboratory research programs; and
- 3 (D) recommended schedules for the continuation, 4 consolidation, or termination of each research pro-
- 5 gram, and continuation, upgrade, transfer, or closure
- 6 of each research facility.
- 7 Not later than December 31, 1997, the Secretary shall trans-
- 8 mit to the Committee on Science of the House of Representa-
- 9 tives and the Committee on Energy and Natural Resources
- 10 of the Senate the report prepared under this paragraph.
- 11 (c) National Spallation Neutron Source.—The
- 12 Secretary shall enter into appropriate arrangements with
- 13 National Academy of Sciences for the Academy to prepare
- 14 a report containing a detailed evaluation of the costs of con-
- 15 struction and operation of the National Spallation Neutron
- 16 Source at alternative appropriate sites, including at least
- 17 the Argonne National Laboratory, the Brookhaven National
- 18 Laboratory, the Los Alamos National Laboratory, and the
- 19 Oak Ridge National Laboratory. Such report shall also in-
- 20 clude an identification of other advantages and disadvan-
- 21 tages of each site evaluated. Not later than December 31,
- 22 1997, the Secretary shall transmit to the Committee on
- 23 Science of the House of Representatives and the Committee
- 24 on Energy and Natural Resources of the Senate the report
- 25 prepared under this subsection. Along with such report, the

- 1 Secretary shall include a recommendation from the Depart-
- 2 ment for the preferred site that will meet its program cri-
- 3 teria, taking into consideration the effect of delay on neu-
- 4 tron science work, existing expertise in the field of neutron
- 5 science, affiliations with institutions of higher education in
- 6 neutron science, and State allocations or commitments to
- 7 facilities.
- 8 SEC. 6. PROHIBITION ON USE OF CLEAN COAL TECH-
- 9 **NOLOGY RESERVE FUNDS.**
- No funds in the Clean Coal Technology Reserve may
- 11 be used to initiate or carry out a clean coal technology pro-
- 12 gram based outside the United States.
- 13 SEC. 7. NEXT GENERATION INTERNET.
- None of the funds authorized by this Act, or any other
- 15 Act enacted before the date of the enactment of this Act,
- 16 may be used for the Next Generation Internet. Notwith-
- 17 standing the previous sentence, funds may be used for the
- 18 continuation of programs and activities that were funded
- 19 and carried out during fiscal year 1997.
- 20 SEC. 8. LIMITATIONS.
- 21 (a) Prohibition of Lobbying Activities.—None of
- 22 the funds authorized by this Act shall be available for any
- 23 activity whose purpose is to influence legislation pending
- 24 before the Congress, except that this subsection shall not pre-
- 25 vent officers or employees of the United States or of its de-

- 1 partments or agencies from communicating to Members of
- 2 Congress on the request of any Member or to Congress,
- 3 through the proper channels, requests for legislation or ap-
- 4 propriations which they deem necessary for the efficient
- 5 conduct of the public business.
- 6 (b) Limitation on Appropriations.—No sums are
- 7 authorized to be appropriated to the Secretary for fiscal
- 8 years 1998 and 1999 for the activities for which sums are
- 9 authorized by this Act, unless such sums are specifically au-
- 10 thorized to be appropriated by this Act.
- 11 (c) Eligibility for Awards.—
- 12 (1) In General.—The Secretary shall exclude
- 13 from consideration for grant agreements made by the
- 14 Department after fiscal year 1997 any person who re-
- 15 ceived funds, other than those described in paragraph
- 16 (2), appropriated for a fiscal year after fiscal year
- 17 1997, under a grant agreement from any Federal
- 18 funding source for a project that was not subjected to
- 19 a competitive, merit-based award process. Any exclu-
- 20 sion from consideration pursuant to this subsection
- shall be effective for a period of 5 years after the per-
- son receives such Federal funds.
- 23 (2) Exception.—Paragraph (1) shall not apply
- to the receipt of Federal funds by a person due to the
- 25 membership of that person in a class specified by law

- for which assistance is awarded to members of the
 class according to a formula provided by law.
- 3 (3) Definition.—For purposes of this subsection, the term "grant agreement" means a legal in-5 strument whose principal purpose is to transfer a 6 thing of value to the recipient to carry out a public purpose of support or stimulation authorized by a 7 8 law of the United States, and does not include the ac-9 quisition (by purchase, lease, or barter) of property or 10 services for the direct benefit or use of the United 11 States Government. Such term does not include a co-12 operative agreement (as such term is used in section 6305 of title 31, United States Code) or a cooperative 13 14 research and development agreement (as such term is 15 defined in section 12(d)(1) of the Stevenson-Wydler 16 Technology Innovation Act of 1980 (15 U.S.C. 17 3710a(d)(1)).

18 **SEC. 9. NOTICE.**

- 19 (a) Notice of Reprogramming.—If any funds au-
- 20 thorized by this Act are subject to a reprogramming action
- 21 that requires notice to be provided to the Appropriations
- 22 Committees of the House of Representatives and the Senate,
- 23 notice of such action shall concurrently be provided to the
- 24 Committees on Science and Commerce of the House of Rep-

1	resentatives and the Committee on Energy and Natural Re-
2	sources of the Senate.
3	(b) Notice of Reorganization.—The Secretary
4	shall provide notice to the Committees on Science, Com-
5	merce, and Appropriations of the House of Representatives
6	and the Committees on Energy and Natural Resources and
7	Appropriations of the Senate, not later than 15 days before
8	any major reorganization of any program, project, or activ-
9	ity of the Department.
10	SEC. 10. SENSE OF CONGRESS ON THE YEAR 2000 PROBLEM
11	With the year 2000 fast approaching, it is the sense
12	of Congress that the Department should—
13	(1) give high priority to correcting all 2-digit
14	date-related problems in its computer systems to en
15	sure that those systems continue to operate effectively
16	in the year 2000 and beyond;
17	(2) assess immediately the extent of the risk to
18	the operations of the Department posed by the prob-
19	lems referred to in paragraph (1), and plan and
20	budget for achieving Year 2000 compliance for all o
21	its mission-critical systems; and
22	(3) develop contingency plans for those systems
23	that the Department is unable to correct in time.

SEC. 11. BUY AMERICAN.

- 2 (a) Compliance With Buy American Act.—No
- 3 funds appropriated pursuant to this Act may be expended
- 4 by an entity unless the entity agrees that in expending the
- 5 assistance the entity will comply with sections 2 through
- 6 4 of the Act of March 3, 1933 (41 U.S.C. 10a-10c, popu-
- 7 larly known as the "Buy American Act").
- 8 (b) Sense of Congress.—In the case of any equip-
- 9 ment or products that may be authorized to be purchased
- 10 with financial assistance provided under this Act, it is the
- 11 sense of Congress that entities receiving such assistance
- 12 should, in expending the assistance, purchase only Amer-
- 13 ican-made equipment and products.
- 14 (c) Notice to Recipients of Assistance.—In pro-
- 15 viding financial assistance under this Act, the Secretary of
- 16 Energy shall provide to each recipient of the assistance a
- 17 notice describing the statement made in subsection (a) by
- 18 the Congress.
- 19 **SECTION 1. SHORT TITLE.**
- This Act may be cited as the "Department
- 21 of Energy Civilian Research and Development
- 22 Act of 1997".
- 23 SEC. 2. DEFINITIONS.
- 24 For purposes of this Act—
- 25 (1) the term "CERN" means the Euro-
- pean Organization for Nuclear Research;

1	(2) the term "Department" means the
2	Department of Energy;
3	(3) the term "Large Hadron Collider
4	project" means the Large Hadron
5	Collider project at CERN; and
6	(4) the term "Secretary" means the
7	Secretary of Energy.
8	SEC. 3. AUTHORIZATION OF APPROPRIATIONS.
9	(a) Energy Supply Research and Devel-
10	OPMENT ACTIVITIES.—There are authorized to
11	be appropriated to the Secretary for Energy
12	Supply Research and Development operating
13	expenses and capital equipment
14	\$1,961,182,000 for fiscal year 1998 and
15	\$1,984,201,000 for fiscal year 1999, of which—
16	(1) \$272,820,000 for fiscal year 1998
17	(reduced by \$15,000,000 to reflect the use
18	of prior year balances) and \$270,342,000
19	for fiscal year 1999 shall be for Solar and
20	Renewable Resources Technologies, in-
21	cluding—
22	(A) \$2,150,000 for fiscal year 1998
23	and \$2,150,000 for fiscal year 1999 for
24	Solar Building Technology Research:

1	(B) \$63,900,000 for fiscal year 1998
2	and \$64,900,000 for fiscal year 1999
3	for Photovoltaic Energy Systems;
4	(C) \$18,170,000 for fiscal year 1998
5	and \$13,620,000 for fiscal year 1999
6	for Solar Thermal Energy Systems;
7	(D) \$28,835,000 for fiscal year 1998
8	and \$28,190,000 for fiscal year 1999
9	for Biopower/Biofuels Energy Sys-
10	tems;
11	(E) \$29,500,000 for fiscal year 1998
12	and \$18,140,000 for fiscal year 1999
13	for Wind Energy Systems;
14	(F) \$2,800,000 for fiscal year 1998
15	and \$500,000 for fiscal year 1999 for
16	the National Renewable Energy Lab-
17	oratory;
18	(G) \$19,518,000 for fiscal year 1998
19	and \$19,518,000 for fiscal year 1999
20	for Geothermal Electric Research and
21	Development and Deployment;
22	(H) \$1,000,000 for fiscal year 1998
23	for Hydropower;
24	(I) \$44,500,000 for fiscal year 1998
25	and \$36.500.000 for fiscal year 1999

1	for Electric Energy Systems and Stor-
2	age, of which—
3	(i) \$8,000,000 for fiscal year
4	1998 shall be for Electric and
5	Magnetic Fields Research and De-
6	velopment;
7	(ii) \$32,500,000 for fiscal year
8	1998 and \$32,500,000 for fiscal
9	year 1999 shall be for High-Tem-
10	perature Superconductivity Re-
11	search and Development; and
12	(iii) \$4,000,000 for fiscal year
13	1998 and \$4,000,000 for fiscal year
14	1999 shall be for Energy Storage
15	Systems;
16	(J) \$50,000,000 for fiscal year 1998
17	and \$75,000,000 for fiscal year 1999
18	shall be for a Solar and Renewable
19	Energy Science Initiative, to be man-
20	aged by the Director of the Office of
21	Energy Research, in consultation
22	with the Assistant Secretary for En-
23	ergy Efficiency and Renewable En-
24	ergy on the goals and priorities of the
25	initiative, for grants to be competi-

1	tively awarded and subject to peer re-
2	view for research related to solar and
3	renewable energy; and
4	(K) \$12,447,000 for fiscal year 1998
5	and \$11,824,000 for fiscal year 1999
6	for Program Direction;
7	(2) \$164,312,000 for fiscal year 1998
8	and \$146,733,000 for fiscal year 1999 shall
9	be for Nuclear Energy, including—
10	(A) \$47,000,000 for fiscal year 1998
11	and \$43,350,000 for fiscal year 1999
12	for Advanced Radioisotope Power
13	Systems;
14	(B) \$9,500,000 for fiscal year 1998
15	and \$8,809,000 for fiscal year 1999 for
16	Oak Ridge Landlord;
17	(C) \$3,217,000 for fiscal year 1998
18	and \$3,217,000 for fiscal year 1999 for
19	Test Reactor Area Landlord;
20	(D) \$2,000,000 for fiscal year 1998
21	for Advanced Test Reactor Fusion Ir-
22	radiations;
23	(E) \$6,000,000 for fiscal year 1998
24	and \$6,000,000 for fiscal year 1999 for

1	University Nuclear Science and Reac-
2	tor Support;
3	(F) \$82,535,000 for fiscal year 1998
4	and \$72,000,000 for fiscal year 1999
5	for Termination Costs; and
6	(G) \$14,060,000 for fiscal year 1998
7	and \$13,357,000 for fiscal year 1999
8	for Program Direction;
9	(3) \$367,538,000 for fiscal year 1998
10	and \$378,564,000 for fiscal year 1999 shall
11	be for Biological and Environmental Re-
12	search, including—
13	(A) \$157,037,000 for fiscal year
14	1998 and \$161,748,000 for fiscal year
15	1999 for Life Sciences;
16	(B) \$100,954,000 for fiscal year
17	1998 and \$103,983,000 for fiscal year
18	1999 for Environmental Processes;
19	(C) \$66,435,000 for fiscal year 1998
20	and \$68,428,000 for fiscal year 1999
21	for Environmental Remediation;
22	(D) \$43,112,000 for fiscal year 1998
23	and \$44,405,000 for fiscal year 1999
24	for Medical Applications and Meas-
25	urement Sciences: and

	01
1	(E) \$1,000,000 for fiscal year 1998
2	and \$1,000,000 for fiscal year 1999 for
3	the United States-Mexico Foundation
4	for Science for research on bio-
5	sciences and the environment,
6	except that, notwithstanding subpara-
7	graphs (A) through (E), the total amount
8	which may be appropriated under this
9	paragraph shall not exceed the overall
10	sums stated at the beginning of this para-
11	graph;
12	(4) \$240,000,000 for fiscal year 1998
13	and \$240,000,000 for fiscal year 1999 shall
14	be for Fusion Energy Sciences, of which
15	\$5,000,000 for fiscal year 1998 and
16	\$5,000,000 for fiscal year 1999 shall be for
17	General Plasma Science;
18	(5) \$659,812,000 for fiscal year 1998
19	and \$678,888,000 for fiscal year 1999 shall
20	be for Basic Energy Sciences, including-
21	(A) \$391,047,000 for fiscal year
22	1998 and \$402,060,000 for fiscal year
23	1999 for Materials Sciences, of which

not to exceed \$5,000,000 for each such

fiscal year may be used for the High

24

1	Flux Beam Reactor at Brookhaven
2	National Laboratory;
3	(B) \$199,933,000 for fiscal year
4	1998 and \$205,931,000 for fiscal year
5	1999 for Chemical Sciences;
6	(C) \$41,371,000 for fiscal year 1998
7	and \$42,612,000 for fiscal year 1999
8	for Engineering and Geosciences; and
9	(D) \$27,461,000 for fiscal year 1998
10	and \$28,285,000 for fiscal year 1999
11	for Energy Biosciences;
12	(6) \$140,907,000 for fiscal year 1998
13	and \$145,134,000 for fiscal year 1999 shall
14	be for Computational and Technology Re-
15	search, including—
16	(A) \$117,490,000 for fiscal year
17	1998 and \$121,014,000 for fiscal year
18	1999 for Mathematical, Information,
19	and Computational Sciences;
20	(B) \$15,829,000 for fiscal year 1998
21	and \$16,304,000 for fiscal year 1999
22	for Laboratory Technology Research;
23	and

1	(C) \$7,588,000 for fiscal year 1998
2	and \$7,816,000 for fiscal year 1999 for
3	Advanced Energy Projects;
4	(7) \$1,500,000 for fiscal year 1998 and
5	\$1,500,000 for fiscal year 1999 shall be for
6	Energy Research Analysis;
7	(8) \$29,070,000 for fiscal year 1998 and
8	\$27,434,000 for fiscal year 1999 shall be
9	for Energy Research-Energy Supply Pro-
10	gram Direction; and
11	(9) \$100,233,000 for fiscal year 1998
12	and \$95,606,000 for fiscal year 1999 shall
13	be for Field Operations.
14	(b) ENERGY ASSETS ACQUISITION.—There
15	are authorized to be appropriated to the Sec-
16	retary for the purchase, construction, expan-
17	sion, and acquisition of real plant, property,
18	and other physical assets for energy supply
19	research and development activities,
20	\$34,885,000 for fiscal year 1998 and $$29,432,000$
21	for fiscal year 1999, of which—
22	(1) for Solar and Renewable Re-
23	sources Technology, \$2,200,000 for fiscal
24	year 1998 shall be for completion of
25	Project 96_E_100, Field Test Laboratory

1	Building Renovation and Expansion, Na-
2	tional Renewable Energy Laboratory;
3	(2) for Nuclear Energy, \$4,425,000 for
4	fiscal year 1998 and \$6,425,000 for fiscal
5	year 1999 shall be for completion of
6	Project 95-E-201, Test Reactor Area Fire
7	and Life Safety Improvements, Idaho Na-
8	tional Engineering and Environmental
9	Laboratory;
10	(3) for Basic Energy Sciences
11	\$7,000,000 for fiscal year 1998 and
12	\$4,000,000 for fiscal year 1999 for comple-
13	tion of Project 96-E-300, Combustion Re-
14	search Facility, Phase II, Sandia National
15	Laboratories, Livermore, California; and
16	(4) for Multiprogram Energy Labora-
17	tories-Facilities Support, \$21,260,000 for
18	fiscal year 1998 and \$19,007,000 for fiscal
19	year 1999 for—
20	(A) Project MEL-001, Multipro-
21	gram Energy Laboratories Infrastruc
22	ture Project, Various Locations,
23	\$7 259 000 for fiscal year 1998 and

12,161,000 for fiscal year 1999;

1	(B) Project 96-E-333, Multipro-
2	gram Energy Laboratories Upgrades,
3	Various Locations, \$5,273,000 for fis-
4	cal year 1998 and \$268,000 for fiscal
5	year 1999;
6	(C) Project 95-E-308, Sanitary
7	System Modifications, Phase II,
8	Brookhaven National Laboratory,
9	Upton, New York, \$568,000 for fiscal
10	year 1998;
11	(D) Project 95-E-307, Fire Safety
12	Improvements-Phase III, Argonne Na-
13	tional Laboratory, Argonne, Illinois,
14	\$718,000 for fiscal year 1998;
15	(E) Project 95-E-301, Central
16	Heating Plant Rehabilitation-Phase I,
17	Argonne National Laboratory, Ar-
18	gonne, Illinois, \$3,442,000 for fiscal
19	year 1998; and
20	(F) Project 94-E-363, Roofing Im-
21	provements, Oak Ridge National Lab-
22	oratory, Oak Ridge, Tennessee,
23	\$4,000,000 for fiscal year 1998 and
24	\$6,578,000 for fiscal year 1999.

1	(c) GENERAL SCIENCE AND RESEARCH AC-
2	TIVITIES.—There are authorized to be appro-
3	priated to the Secretary for General Science
4	and Research Activities operating expenses
5	and capital equipment—
6	(1) \$865,210,000 for fiscal year 1998
7	(reduced by \$15,000,000 to reflect the use
8	of prior year balances), including—
9	(A) \$599,185,000 for High Energy
10	Physics;
11	(B) \$256,525,000 for Nuclear Phys-
12	ics; and
13	(C) \$9,500,000 for Program Direc-
14	tion; and
15	(2) \$941,000,000 for fiscal year 1999,
16	including—
17	(A) \$607,645,000 for High Energy
18	Physics;
19	(B) \$324,330,000 for Nuclear Phys-
20	ics; and
21	(C) \$9,025,000 for Program Direc-
22	tion.
23	None of the funds authorized for High Energy
24	Physics by this subsection or subsection (d)
25	may be used for the Large Hadron Collider

1	project, unless the Secretary, in consultation
2	with the Director of the National Science
3	Foundation, has transmitted to the Commit-
4	tee on Science of the House of Representa-
5	tives and the Committee on Energy and Natu-
6	ral Resources of the Senate a report on the
7	impacts of such funding on the operations
8	and viability of United States high energy and
9	nuclear physics facilities.
10	(d) SCIENCE ASSETS ACQUISITION.—There
11	are authorized to be appropriated to the Sec-
12	retary for the purchase, construction, expan-
13	sion, and acquisition of real plant, property,
14	and other physical assets for general science
15	and research activities, \$126,870,000 for fiscal
16	year 1998, of which—
17	(1) \$50,850,000 shall be for High En-
18	ergy Physics, including—
19	(A) \$30,950,000 for completion of
20	Project 92-G-302, Fermilab Main In-
21	jector, Fermi National Accelerator
22	Laboratory, Illinois;
23	(B) \$9,400,000 for completion of
24	Project 97-G-303, Stanford Linear Ac-

1	celerator Center Master Station Up-
2	grade, California;
3	(C) \$5,500,000 for architectural
4	engineering and technical design
5	work for Project 98-G-304, Neutrinos
6	at the Main Injector, Fermi National
7	Accelerator Laboratory, Illinois; and
8	(D) \$5,000,000 for completion of
9	Project 98-G-305, Fermilab C-Zero
10	Area Experimental Hall, Fermi Na-
11	tional Accelerator Laboratory, Illi-
12	nois; and
13	(2) \$76,020,000 shall be for Nuclear
14	Physics, for completion of Project 91-G-
15	300, Relativistic Heavy Ion Collider,
16	Brookhaven National Laboratory, Upton,
17	New York.
18	(e) Fossil Energy Research and Develop-
19	MENT.—There are authorized to be appro-
20	priated to the Secretary for Fossil Energy Re-
21	search and Development operating expenses,
22	capital equipment, and construction,
23	\$335,919,000 for fiscal year 1998 and
24	\$335,250,000 for fiscal year 1999, of which—

1	(1) \$105,831,000 for fiscal year 1998
2	and \$104,206,000 for fiscal year 1999 shall
3	be for Coal operating expenses, includ-
4	ing—
5	(A) \$5,064,000 for fiscal year 1998
6	and \$5,064,000 for fiscal year 1999 for
7	Coal Preparation;
8	(B) \$5,816,000 for fiscal year 1998
9	and \$5,816,000 for fiscal year 1999 for
10	Direct Liquefaction;
11	(C) \$4,223,000 for fiscal year 1998
12	and \$4,223,000 for fiscal year 1999 for
13	Indirect Liquefaction;
14	(D) \$741,000 for fiscal year 1998
15	and \$741,000 for fiscal year 1999 for
16	Advanced Clean Fuels Research Ad-
17	vanced Research and Environmental
18	Technology;
19	(E) \$5,462,000 for fiscal year 1998
20	and \$5,462,000 for fiscal year 1999 for
21	Advanced Pulverized Coal-Fired Pow-
22	erplant;
23	(F) \$10,927,000 for fiscal year 1998
24	and \$10,927,000 for fiscal year 1999
25	for Indirect Fired Cycle:

1	(G) \$22,342,000 for fiscal year 1998
2	and \$20,717,000 for fiscal year 1999
3	for High-Efficiency-Integrated Gasifi-
4	cation Combined Cycle;
5	(H) \$17,875,000 for fiscal year 1998
6	and \$17,875,000 for fiscal year 1999
7	for High-Efficiency Pressurized Fluid-
8	ized Bed;
9	(I) \$9,734,000 for fiscal year 1998
10	and \$9,734,000 for fiscal year 1999 for
11	Advanced Clean/Efficient Power Sys-
12	tems Advanced Research and Envi-
13	ronmental Technology; and
14	(J) \$23,647,000 for fiscal year 1998
15	and \$23,647,000 for fiscal year 1999
16	for Advanced Research and Tech-
17	nology Development;
18	(2) \$47,419,000 for fiscal year 1998 and
19	\$46,464,000 for fiscal year 1999 shall be
20	for Oil Technology operating expenses,
21	including—
22	(A) \$31,157,000 for fiscal year 1998
23	and \$31,157,000 for fiscal year 1999
24	for Exploration and Production Sup-
25	porting Research:

1	(B) \$3,931,000 for fiscal year 1998
2	and \$3,931,000 for fiscal year 1999 for
3	Recovery Field Demonstrations;
4	(C) \$6,411,000 for fiscal year 1998
5	and \$5,456,000 for fiscal year 1999 for
6	Exploration and Production Environ-
7	mental Research; and
8	(D) \$5,920,000 for fiscal year 1998
9	and \$5,920,000 for fiscal year 1999 for
10	Processing Research and Down-
11	stream Operations;
12	(3) \$85,877,000 for fiscal year 1998 and
13	\$85,877,000 for fiscal year 1999 shall be
14	for Gas operating expenses, including—
15	(A) \$14,123,000 for fiscal year 1998
16	and \$14,123,000 for fiscal year 1999
17	for Natural Gas Research Exploration
18	and Production;
19	(B) \$993,000 for fiscal year 1998
20	and \$993,000 for fiscal year 1999 for
21	Natural Gas Research Delivery and
22	Storage;
23	(C) \$31,379,000 for fiscal year 1998
24	and \$31,379,000 for fiscal year 1999

1	for Natural Gas Research Advanced
2	Turbine Systems;
3	(D) \$4,808,000 for fiscal year 1998
4	and \$4,808,000 for fiscal year 1999 for
5	Natural Gas Research Utilization;
6	(E) \$4,617,000 for fiscal year 1998
7	and \$4,617,000 for fiscal year 1999 for
8	Natural Gas Research Environmental
9	Research/Regulatory Analysis;
10	(F) \$1,210,000 for fiscal year 1998
11	and \$1,210,000 for fiscal year 1999 for
12	Fuel Cells Advanced Research;
13	(G) \$16,335,000 for fiscal year 1998
14	and \$16,335,000 for fiscal year 1999
15	for Fuel Cells Molten Carbonate Sys-
16	tems to continue cost-shared cost re-
17	duction and performance improve-
18	ment of one system; and
19	(H) \$12,412,000 for fiscal year 1998
20	and \$12,412,000 for fiscal year 1999
21	for Fuel Cells Advanced Concepts;
22	(4) \$61,783,000 for fiscal year 1998 and
23	\$62,494,000 for fiscal year 1999 shall be
24	for Program Direction and Management
25	Support operating expenses, including—

1	(A) \$13,676,000 for fiscal year 1998
2	and \$12,992,000 for fiscal year 1999
3	for Headquarters Program Direction;
4	and
5	(B) \$48,107,000 for fiscal year 1998
6	and \$49,502,000 for fiscal year 1999
7	for Energy Technology Center Pro-
8	gram Direction;
9	(5) \$2,000,000 for fiscal year 1998 and
10	\$2,000,000 for fiscal year 1999 shall be for
11	Plant and Capital Equipment, for con-
12	struction of General Plant Projects;
13	(6) \$5,836,000 for fiscal year 1998 and
14	\$5,836,000 for fiscal year 1999 shall be for
15	Cooperative Research and Development
16	operating expenses;
17	(7) \$2,173,000 for fiscal year 1998 and
18	\$2,173,000 for fiscal year 1999 shall be for
19	Fuels Conversion, Natural Gas, and Elec-
20	tricity operating expenses; and
21	(8) \$25,000,000 for fiscal year 1998 and
22	\$30,000,000 for fiscal year 1999 shall be
23	for a Fossil Energy Science Initiative to
24	be managed by the Director of the Office

of Energy Research, in consultation with

- 1 the Assistant Secretary for Fossil Energy
- 2 on the goals and priorities of the initia-
- 3 tive, for grants to be competitively
- 4 awarded and subject to peer review for
- 5 research relating to fossil energy.
- 6 Notwithstanding paragraphs (1) through (8),
- 7 the total amount which may be appropriated
- 8 under this subsection shall not exceed the
- 9 overall sums stated at the beginning of this
- 10 subsection;
- 11 (f) Energy Conservation Research and
- 12 DEVELOPMENT.—There are authorized to be
- 13 appropriated to the Secretary for Energy
- 14 Conservation Research and Development op-
- 15 erating expenses and capital equipment,
- 16 **\$414,208,000** for fiscal year 1998 (reduced by
- 17 \$20,000,000 to reflect the use of prior year bal-
- 18 ances) and \$436,703,000 for fiscal year 1999, of
- 19 which—
- 20 **(1) \$41,004,000 for fiscal year 1998 and**
- 21 **\$40,230,000** for fiscal year **1999** shall be
- for the Building Technology, State and
- 23 Community Sector (Non-Grants), includ-
- 24 **ing**—

1	(A) \$8,762,000 for fiscal year 1998
2	and \$8,762,000 for fiscal year 1999 for
3	Building Systems Design for Building
4	America Program;
5	(B) \$20,550,000 for fiscal year 1998
6	and \$20,250,000 for fiscal year 1999
7	for Building Equipment and Mate-
8	rials; and
9	(C) \$11,692,000 for fiscal year 1998
10	and \$11,218,000 for fiscal year 1999
11	for Management and Planning;
12	(2) \$125,380,000 for fiscal year 1998
13	and \$125,048,000 for fiscal year 1999 shall
14	be for the Industry Sector, including—
15	(A) \$55,660,000 for fiscal year 1998
16	and \$55,660,000 for fiscal year 1999
17	for Industries of the Future (Spe-
18	cific);
19	(B) \$39,120,000 for fiscal year 1998
20	and \$39,120,000 for fiscal year 1999
21	for Industries of the Future (Cross-
22	cutting);
23	(C) \$23,950,000 for fiscal year 1998
24	and \$23,950,000 for fiscal year 1999
25	for Technology Access; and

1	(D) \$6,650,000 for fiscal year 1998
2	and \$6,318,000 for fiscal year 1999 for
3	Management and Planning;
4	(3) \$176,876,000 for fiscal year 1998
5	and \$176,525,000 for fiscal year 1999 shall
6	be for the Transportation Sector, includ-
7	ing—
8	(A) \$124,046,000 for fiscal year
9	1998 and \$124,046,000 for fiscal year
10	1999 for Advanced Automotive Tech-
11	nologies;
12	(B) \$18,000,000 for fiscal year 1998
13	and \$18,000,000 for fiscal year 1999
14	for Advanced Heavy Vehicle Tech-
15	nologies;
16	(C) \$30,500,000 for fiscal year 1998
17	and \$30,500,000 for fiscal year 1999
18	for Transportation Materials Tech-
19	nologies; and
20	(D) \$7,030,000 for fiscal year 1998
21	and \$6,679,000 for fiscal year 1999 for
22	Implementation and Program Man-
23	agement,
24	except that, notwithstanding subpara-
25	graphs (A) through (D), the total amount

- which may be appropriated under this paragraph shall not exceed the overall
- 3 sums stated at the beginning of this para-
- 4 graph;
- 5 (4) \$20,948,000 for fiscal year 1998 and 6 \$19,900,000 for fiscal year 1999 shall be 7 for Policy and Management; and
- (5) \$50,000,000 for fiscal year 1998 and 8 \$75,000,000 for fiscal year 1999 shall be 9 for an Energy Efficiency Science Initia-10 tive to be managed by the Director of the 11 12 Office of Energy Research, in consultation with the Assistant Secretary for En-13 ergy Efficiency and Renewable Energy on 14 the goals and priorities of the initiative, 15 for grants to be competitively awarded 16 17 and subject to peer review for research 18 relating to energy efficiency.
- 19 SEC. 4. FUNDING LIMITATIONS.
- None of the funds authorized by this Act
- 21 for fiscal year 1998 or fiscal year 1999 may be
- 22 used for the following programs, projects, and
- 23 activities, except to fulfill contractual obliga-
- 24 tions:

1	(1) Nuclear Energy Advanced Light
2	Water Reactor.
3	(2) Nuclear Energy Commercial Reac-
4	tor.
5	(3) Nuclear Energy Security.
6	(4) Nuclear Energy Termination Costs
7	Gas Turbine-Modular Helium Reactor.
8	(5) Nuclear Energy Termination Costs
9	Advanced Light Water Reactor.
10	(6) Fossil Energy Research and Devel-
11	opment Advanced Research and Tech-
12	nology Development Coal Technology Ex-
13	port.
14	SEC. 5. NATIONAL ACADEMY OF SCIENCES REPORTS.
15	(a) HIGH ENERGY AND NUCLEAR PHYSICS.—
16	The Secretary shall enter into appropriate ar-
17	rangements with National Academy of
18	Sciences for the Academy to prepare a report
19	on the high energy and nuclear physics activi-
20	ties of the Department, assuming a combined
21	budget of \$977,080,000 for all activities au-
22	thorized under section 3 (c) and (d) for fiscal
23	year 1998, and \$941,000,000 for each of the fis-
24	cal years 1999, 2000, 2001, and 2002. The re-
25	port shall include—

- 1 (1) a priority list of research opportu-2 nities, including both ongoing and pro-3 posed activities;
 - (2) an analysis of the relevance of each research facility to the research opportunities listed under paragraph (1);
 - (3) recommendations for the optimal balance among facility operations, construction, and research support and the optimal balance between university and laboratory research programs; and
- 12 **(4) recommended schedules for the**13 **continuation, consolidation, or termi-**14 **nation of each research program, and**15 **continuation, upgrade, transfer, or clo-**16 **sure of each research facility.**
- 17 Not later than December 31, 1997, the Sec-
- 18 retary shall transmit to the Committee on
- 19 Science of the House of Representatives and
- 20 the Committee on Energy and Natural Re-
- 21 sources of the Senate the report prepared
- 22 under this subsection.
- 23 **(b)** Basic Energy Sciences.—(1) The Sec-
- 24 retary shall enter into appropriate arrange-
- 25 ments with the National Academy of Sciences

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- 1 for the Academy to prepare a report on the
- 2 basic energy sciences activities of the Depart-
- 3 ment, based on the following three budget op-
- 4 tions for the entire Basic Energy Sciences ac-
- 5 count and all related research and energy
- 6 asset activities:
- 7 (A) Provision of \$683,000,000 for each 8 of the fiscal years 1999 through 2002.
- 9 **(B) Provision of \$683,000,000 for fiscal**10 **year 1999, and an amount reflecting a**11 **three percent reduction in each year**12 **thereafter through fiscal year 2002.**
- 13 (C) Provision of \$683,000,000 for fiscal 14 year 1999, and an amount reflecting a 15 three percent increase in each year 16 thereafter through fiscal year 2002.
- 17 **(2)** None of the figures described in para-18 graph (1) (A) through (C) shall be altered to 19 reflect inflationary allowances. The report 20 shall include—
- 21 **(A)** a priority list of research opportu-22 **nities, including both ongoing and pro-**23 **posed activities;**
- 24 **(B)** an analysis of the relevance of 25 **each research facility to the research op-**

- 1 portunities listed under subparagraph
- 2 **(A)**;
- 3 (C) recommendations for the optimal
- 4 balance among facility operations, con-
- 5 struction, and research support and the
- 6 optimal balance between university and
- 7 laboratory research programs; and
- 8 (D) recommended schedules for the
- 9 continuation, consolidation, or termi-
- 10 nation of each research program, and
- 11 continuation, upgrade, transfer, or clo-
- sure of each research facility.
- 13 Not later than December 31, 1997, the Sec-
- 14 retary shall transmit to the Committee on
- 15 Science of the House of Representatives and
- 16 the Committee on Energy and Natural Re-
- 17 sources of the Senate the report prepared
- 18 under this paragraph.
- 19 (c) NATIONAL SPALLATION NEUTRON
- 20 Source.—The Secretary shall enter into ap-
- 21 propriate arrangements with National Acad-
- 22 emy of Sciences for the Academy to prepare
- 23 a report containing a detailed evaluation of
- 24 the costs of construction and operation of the
- 25 National Spallation Neutron Source at alter-

- 1 native appropriate sites, including at least the
- 2 Argonne National Laboratory, the
- 3 Brookhaven National Laboratory, the Los Ala-
- 4 mos National Laboratory, and the Oak Ridge
- 5 National Laboratory. Such report shall also
- 6 include an identification of other advantages
- 7 and disadvantages of each site evaluated. Not
- 8 later than December 31, 1997, the Secretary
- 9 shall transmit to the Committee on Science of
- 10 the House of Representatives and the Com-
- 11 mittee on Energy and Natural Resources of
- 12 the Senate the report prepared under this
- 13 subsection. Along with such report, the Sec-
- 14 retary shall include a recommendation from
- 15 the Department for the preferred site that
- 16 will meet its program criteria, taking into
- 17 consideration the effect of delay on neutron
- 18 science work, existing expertise in the field of
- 19 neutron science, affiliations with institutions
- 20 of higher education in neutron science, and
- 21 State allocations or commitments to facilities.
- 22 SEC. 6. NEXT GENERATION INTERNET.
- None of the funds authorized by this Act,
- 24 or any other Act enacted before the date of
- 25 the enactment of this Act, may be used for the

- 1 Next Generation Internet. Notwithstanding
- 2 the previous sentence, funds may be used for
- 3 the continuation of programs and activities
- 4 that were funded and carried out during fis-
- 5 **cal year 1997.**
- 6 SEC. 7. LIMITATIONS.
- 7 (a) Prohibition of Lobbying Activities.—
- 8 None of the funds authorized by this Act shall
- 9 be available for any activity whose purpose is
- 10 to influence legislation pending before the
- 11 Congress, except that this subsection shall
- 12 not prevent officers or employees of the Unit-
- 13 ed States or of its departments or agencies
- 14 from communicating to Members of Congress
- 15 on the request of any Member or to Congress,
- 16 through the proper channels, requests for leg-
- 17 islation or appropriations which they deem
- 18 necessary for the efficient conduct of the pub-
- 19 lic business.
- 20 **(b)** Limitation on Appropriations.—No
- 21 sums are authorized to be appropriated to the
- 22 Secretary for fiscal years 1998 and 1999 for
- 23 the activities for which sums are authorized
- 24 by this Act, unless such sums are specifically
- 25 authorized to be appropriated by this Act.

(c) ELIGIBILITY FOR AWARDS.—

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- (1) IN GENERAL.—The Secretary shall exclude from consideration for grant agreements made by the Department after fiscal year 1997 any person who received funds, other than those described in paragraph (2), appropriated for a fiscal year after fiscal year 1997, under a grant agreement from any Federal funding source for a project that was not subcompetitive, merit-based jected to a award process. Any exclusion from consideration pursuant to this subsection shall be effective for a period of 5 years after the person receives such Federal funds.
- (2) EXCEPTION.—Paragraph (1) shall not apply to the receipt of Federal funds by a person due to the membership of that person in a class specified by law for which assistance is awarded to members of the class according to a formula provided by law.
- (3) DEFINITION.—For purposes of this subsection, the term "grant agreement"

- means a legal instrument whose principal 1 purpose is to transfer a thing of value to 2 the recipient to carry out a public pur-3 pose of support or stimulation authorized by a law of the United States, and does 5 6 not include the acquisition (by purchase, lease, or barter) of property or services 7 for the direct benefit or use of the United 8 States Government. Such term does not 9 include a cooperative agreement (as such 10 term is used in section 6305 of title 31, 11 United States Code) or a cooperative re-12 search and development agreement (as 13 such term is defined in section 12(d)(1) of 14 the Stevenson-Wydler Technology Inno-15 vation Act of 1980 (15 U.S.C. 3710a(d)(1))). 16
- 17 SEC. 8. NOTICE.
- 18 (a) NOTICE OF REPROGRAMMING.—If any
- funds authorized by this Act are subject to a
- 20 reprogramming action that requires notice to
- 21 be provided to the Appropriations Commit-
- 22 tees of the House of Representatives and the
- Senate, notice of such action shall concur-
- 24 rently be provided to the Committees on
- 25 Science and Commerce of the House of Rep-

- 1 resentatives and the Committee on Energy
- 2 and Natural Resources of the Senate.
- 3 **(b) NOTICE OF REORGANIZATION.—The Sec-**
- 4 retary shall provide notice to the Committees
- 5 on Science, Commerce, and Appropriations of
- 6 the House of Representatives, and the Com-
- 7 mittees on Energy and Natural Resources and
- 8 Appropriations of the Senate, not later than
- 9 15 days before any major reorganization of
- 10 any program, project, or activity of the De-
- 11 partment.
- 12 SEC. 9. SENSE OF CONGRESS ON THE YEAR 2000 PROBLEM.
- With the year 2000 fast approaching, it is
- 14 the sense of Congress that the Department
- 15 should—
- 16 (1) give high priority to correcting all
- 2-digit date-related problems in its com-
- puter systems to ensure that those sys-
- tems continue to operate effectively in
- the year 2000 and beyond;
- 21 (2) assess immediately the extent of
- 22 the risk to the operations of the Depart-
- 23 ment posed by the problems referred to
- in paragraph (1), and plan and budget for

- achieving Year 2000 compliance for all of
- 2 its mission-critical systems; and
- 3 (3) develop contingency plans for
- 4 those systems that the Department is un-
- 5 able to correct in time.
- 6 SEC. 10. BUY AMERICAN.
- 7 (a) COMPLIANCE WITH BUY AMERICAN ACT.—
- 8 No funds appropriated pursuant to this Act
- 9 may be expended by an entity unless the en-
- 10 tity agrees that in expending the assistance
- 11 the entity will comply with sections 2 through
- 12 4 of the Act of March 3, 1933 (41 U.S.C. 10a-
- 13 10c, popularly known as the "Buy American
- 14 **Act").**
- 15 **(b)** SENSE OF CONGRESS.—In the case of
- 16 any equipment or products that may be au-
- 17 thorized to be purchased with financial assist-
- 18 ance provided under this Act, it is the sense
- 19 of Congress that entities receiving such as-
- 20 sistance should, in expending the assistance,
- 21 purchase only American-made equipment and
- 22 **products.**
- 23 (c) NOTICE TO RECIPIENTS OF ASSISTANCE.—
- 24 In providing financial assistance under this
- 25 Act, the Secretary of Energy shall provide to

- 1 each recipient of the assistance a notice de-
- 2 scribing the statement made in subsection (a)
- 3 by the Congress.